## DESCRIPTION OF A NEW SPECIES OF THYRSITOPS (T. VIOLACEUS) FROM THE FISHING-BANKS OFF THE NEW ENGLAND COAST.

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On the 7 th of Norember, 1857 , the National Musemm receiced from Mr. W. A. Wilcox, agent of the U. S. Fish Commission at Gloncester, Mass., two fresh fishes, a Bhae Chimrra, C. affinis, and a species of Thyrsitops, which does not appear to agree with any of the described species. The latter was caught by Capt. Thomas Thompson, schooner M. A. Baston, on Le Have Bank, in 125 fathoms.

The Thyrsitops is number 39287 of the fish register. It is 44 inches long to the base of the midlle caudal rays. It is more nearly related to lepidopoides than to any other species; in fact, it is not very closely related to any of the others. If we may trust the figures and descriptions of T. lepidopoides our new species has a larger number of dorsal spines and rays and a much smaller number of dorsal and anal fiulets. $T$. lepidopoides is said to be uniform silvery, the back somewhat plumbeous and the fins gray. Our species is uniformly purplish-brown, the spinous dorsal, pectorals, rentrals, and inside of the mouth blackish.

The body is stout, its greatest width being exactly one-ualf of the height at the anal origin. The greatest height of the body is one-half of the length of the head, and is contained 8 times in the total length without caudal. The length of the head is one-fourth of the standard length; its greatest width is contained $4 \frac{1}{2}$ times in its length. The width of the interorbital area is slightly greater than the length of the eye, which is contained nearly $7 \frac{1}{2}$ times in the length of the head and 32 times in the leugth of the mper jaw. The least height of the tail equals the width of the interorbital area. The length of the snout equals twice the length of the longest clorsal spine, and one-half the distance from the tip of the snont to the origin of the spinons dorsal. The maxilla extends to the vertical through the front of the eye. The length of the upper jaw equals $3 \frac{1}{4}$ times the width of the interorbital space. The mandible reaches to the vertical through the hind margin of the eye; its length, including the fleshy tip, is 5 times the width of the interorbital area The anterior nostril is smaller than the posterior; it is situated in advance of the eje one diameter of the eje. The posterior nostril is a narrow slit placed midway between the anterior and the eye. Strong teeth on the intermaxillary and mandible. Three large fangs anteriorly in the roof of the month; pseudobranchiae well dereloped; no trace of gill-rakers. The spinous dorsal begins at a distance from the snout, which equals twice the length of the snout; it is highest in the midde. The ninth and thirteenth spines are slightly longer than the third spine and more than twice as long as the twentieth, their length equaling one-half that of the snont. The soft dorsal is highest anteriorly, its longest ray, the fifth, being nearly twice the least height of the tail. The caudal is forked; its middle rays about one-half as long as the external

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rays. The aual origin is under the third ray of the soft dorsal, its distance from the rent $2 \pm$ times the length of the dagger-shaped spine The vent is directly under the end of the spinous dorsal. The anal rays are longest anteriorly, the fifth ray being nearly as long as the corresponding ray of the soft dorsal. The dagger-shaped spine in front of the anal equals one-half the least height of the tail. The ventral is immediately under the third spine of dorsal; its first and longest ray equals three-fourths of the interorbital width. The fifth ray is about two-thirds as long as the first. The pectoral begins under the second dorsal spine; its length equals $2 \frac{1}{2}$ times the width of the interorbital area. It extends to the vertical midway between the fifth and sixth dorsal spines.

The lateral line is well developed; it descends gradually from the upper augle of the gill opening, reaching the median line of the body under the soft dorsal. The scales are irregular in shape, thin, elongate, cycloid, and deciduous.

Color, purplish. The spinous dorsal, pectorals, rentrals, and inside of mouth blackish.
D. $\mathbf{X X}, 1,19+2$ finlets ; A. $17+3$ finlets; V. I., $5 ;$ p. 13.

TABLE OF MEASUREMENTS. mm .
Length to base of caudal ( 44 inches) ....... .............................................. 1115
Greatest height of body ......................................................................... 138
Height at ventrals ............................................................................. 126
Height at anal origin .............................................................................. 112
Least height of tail................................................................................ 40
Greatest width of body............................................................................. 56
Length of head...................................................................................... 280
Greatest width of head............................................................................. 62
Width of interorbital area................................................................... 40
Length of snout................................................................................ 117
Length of npper jaw............................................................................ 130
Length of mandible, with tip .................................... ....................... 203
Length of mandibular tip . ................................................................... 23
Length of eye.... ................................................................................ 37
Spinous dorsal, from tip of snout ......................................................... 233
Length of third dorsal spine..........................-.-.................................... 55
Length of ninth dorsal spine.... ............................................................. 58
Length of thirteenth dorsal spine............. ............................................. 58
Length of tirentieth dorsal spine .... ................................................... 25
Length of fifth dorsal ray ...................................................................... 78
Length of last dorsal ray................................................................... 20
Length of secoud dorsal finlet ............................................................. 28
Caudal, length of middle rays ............................................................... 58
Caudal, length of external rays............................................................. 116
Pectoral, from tip of suout ....... ......................................................... 255
Length of pectoral................................................................................ 100
Ventral, from tip of snont.. ................................................................ 205
Length of first ventral ray ..................................................................... 30
Length of fifth ventral ray..................................................................... 22
Vont, from dagger-shaped spine............................................................ 32
Length of dagger-shaped spine .............................................................. 20
Anal, from vent.............. ............ ..................................................... 45 .
Length of fifth anal ray ........................................................................ 72
Length of last anal ray........................................................................ 20
Length of last anal finlet...................................................................... 2t

